

## Penn State's Ag Progress Days Focuses On Pennsylvania's High Tech Approach

ROCKSPRING (Centre Co.) — Thanks to computers and satellite technology, consumers can check their e-mail computers on airplanes and make cellular telephone calls from desolate deserts.

Nowadays, farmers, federal and state agencies, and agribusinesses are using these same systems to grow better crops, manage insect pests and track land-use patterns and water resources.

Visitors to Penn State's Ag Progress Days, Aug. 18-20, can plug into these fascinating technologies as well.

The College of Agricultural Sciences Exhibits Building, on West 11th Street at the Ag Progress Days site at Rock Springs, will feature displays on many aspects of precision agriculture, global positioning technology and Geographic Information Systems (GIS). Visitors can learn how satellite positioning technology and computer mapping can help farmers, businesses and municipalities better understand the world around them.

"Today, a typical Pennsylvania farmer using a laptop computer and a global positioning system

can map his fields for nutrient deficiencies, target specific acres for pesticide applications and notify the county soil conservation office of changes in his acreage," said David Wagner, assistant professor of agricultural engineering.

"Mapping technology also is used to pinpoint land-use patterns, locate 911 emergency systems and identify agricultural land preservation acreage. Remote sensing technology can detect whether a plant is under stress or growing steadily."

One of the building's main exhibits offers a window into how farmers can use precision agriculture and satellite technologies. A demonstration of field mapping will allow visitors to pinpoint the location of their farm and then print out an aerial-view map of the property within minutes. A display on remote sensing technology will show how farmers and scientists can use computers, infrared equipment and other sensing tools to collect data from acres as small as a single plant leaf to acre-size plots of farmland.

"Most people think remote sensing is done only by satellite," Wagner said. "In reality,

remote sensing can be done from an airplane or on the ground taking two readings two feet above the canopy of a plant."

New production tools used in precision agriculture also will be featured. "Not every farming operation can use every tool designed for precision agriculture," Wagner said. "But there may be tools or technologies that farmers can easily adapt to their own needs."

Another major exhibit details how federal and state agencies and private citizens can use GIS systems. A dazzling color computer display will show how counties or municipalities can map 911 emergency systems, utility grids, water resources and treatment systems and other information in a central database. The information then can be analyzed in pieces or as an entire system. In addition, the display includes demonstrations of how GIS technology is used for farm and land preservation and environmental analysis.

"Geographic information systems can give municipal and state officials the big picture in a literal sense," said Rick Day, assistant professor of soil science and environmental systems. "GIS technology can be used to see how a small town

Penn State Ag

# PROGRESS

## 1998

uses its water supply or to reveal how the streams and rivers of Pennsylvania affect the Chesapeake Bay."

Farmers and other interested visitors will get their chance to see how global positioning systems can be used in crop scouting and nutrient management. One display will detail how global positioning technology can be integrated into pest control programs by using mapping to track insect populations on specific fields.

Curious visitors can get an up-close look at a variety of precision agriculture equipment, including a precision application sprayer using direct injection technology, as well as four-wheel all-terrain vehicle outfitted with state-of-the-art global positioning equipment. The Pennsylvania Department of Agriculture will staff an exhibit on farm and land preservation. "Stake Your Acres," a farming

computer game, will be available for teens to play.

The College of Agricultural Sciences' Publications Distribution Center will provide a display of college publications. Visitors can take a variety of free publications and pick up an order form for the college's for-sale publications.

Penn State's Ag Progress Days features more than 500 acres of educational and commercial exhibits. The Russell E. Larson Agricultural Research Center is located nine miles southwest of State College on Route 45. Hours are 9 a.m. to 5 p.m. Tuesday and Thursday, with extended hours on Wednesday from 9 a.m. to 8 p.m. Admission and parking are free.

For more information, call (800) PSU-1010 July 13 through Aug. 20. Or, if you have access to the Internet, visit Ag Progress Days on the World Wide Web at <http://apd.cas.psu.edu>.



### AGRICULTURAL ENGINEERING CONSULTANTS

"CALL US TO DESIGN YOUR NEXT BUILDING PROJECT"

- FARMSTEAD PLANNING
- BUILDING DESIGN
- BLUEPRINT DRAFTING
- VENTILATION DESIGN
- DAIRY FACILITIES DESIGN

**Timber Tech Engineering, Inc.**  
 P.O. Box 145  
 254 West Franklin Street  
 Womelsdorf, PA 19567  
 PH: (610) 589-4589  
 FAX: (610) 589-5384



# 1 - 800 - 345 - 3546

#### Distributors of:

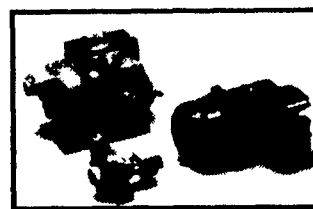
- Not a tank
- A wide variety of pumps, valves, couplings, fittings & hose
- Spraying Systems
- Accessories
- Melroe Spra-Coupe
- Mobility Spreaders
- Iyco Blenders & Conveyors
- Mid-State Tanks
- Precision Full Sprayers



▲ FOAM MARKERS



◀ COUPLERS



▲ PUMPS

▶ FOAM



INCORPORATED

What you need...When you need it!

#### Manufacturers of:

- HydraSpray
- Row-Cat Crop Sprayer
- Transpread Spreaders
- Nozzle Alerts



▼ TIPS AND NOZZLES

MOTORIZED BALL VALVE

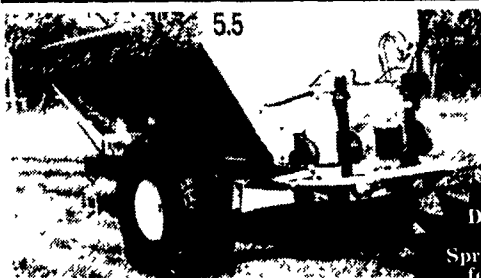


◀ VALVES

▼ TANKS



#### GVM TRANSPREAD PULL SPREADER



ACCURATE SPREAD PATTERN

DOUBLE DUTY  
 Spreads lime, fertilizer, gypsum and fowl manure.

Also the widest spread pattern in the industry. covers 50-100% more acres per day.

#### SPRA-COUBE

3640



INCORPORATED

374 HEIDLEBURG ROAD  
 BIGLERVILLE, PA 17307  
 800-345-3546

Web Site: <http://www.gvminc.com>

Visa & Mastercard accepted with all orders.

## VISIT OUR DISPLAY AT AG PROGRESS DAYS - AUGUST 18, 19 & 20 - EAST 1ST STREET